

## Quality Control (QC) and Record Requirements Checklist \*

### for BOD, TSS, Ammonia and Phosphorus

Based on NR 149 (1998). Indicate yes (Y), no (N) or not applicable (NA) for each analyte. SC indicates that you should see checklist (SC) that is specific to that analyte.

\*This checklist is for the aid of the Department and the laboratory. It is only an audit guideline, it is not meant to establish regulatory standards or to dictate audit format. Laboratories must comply with all applicable rule and method requirements whether listed on this checklist or not. The general quality control and record requirements are covered on a separate QC and Records Checklist.

	Quality Control	BOD	TSS	NH3	P	Notes	Citation
1	Is a method blank analyzed with each batch of samples?	SC	NA				NR 149.14(3)d.
2	Is corrective action taken if the method blank is above the LOD, 5% of regulatory limit <u>or</u> 5% of the sample concentration (whichever is <u>highest</u> )?	SC	NA				NR 149.14(3)d.
3	Is a replicate run after the analysis of 20 samples of each matrix type (at least 1 replicate for 20 samples)?						NR 149.14 (3)e.
4	Are quality control (QC) limits for replicates calculated for each matrix (unless lab has < 20 QC results/year then they can set QC limits)?						NR 149.14 (3)g.
5	Are QC limits used to assess replicate performance each time replicates are analyzed?						NR 149.14 (3)g.
6	Is a spike run after the analysis of 20 samples of each matrix type (at least 1 spike for every 20 samples)?	NA	NA				NR 149.14 (3)f.2
7	Are QC limits for spikes calculated for each matrix (unless lab has < 20 QC results/year then they can set QC limits)?	NA	NA				NR 149.14 (3)g.
8	Are QC limits used to assess spike performance each time spikes are analyzed?	NA	NA				NR 149.14 (3)g.
9	Is a known standard analyzed after 20 samples (+/-10%)?	SC	NA				NR 149.14 (3)c.
10	When QC limits for standards, replicates, spikes or blanks are exceeded is corrective action taken?						NR 149.14 (3)h.
11	Are blind standards analyzed three times a year with 3 to 5 month spacing between each set?						NR 149.14 3(j).
12	When a blind standard result fails is a new standard ordered and analyzed after taking corrective action?						NR 149.14 3(j).

See next page for records requirements.

## QC/Records Checklist

	Records	BOD	TSS	NH3	P	Notes	Citation
13	Are all records available for last 3 years of analysis?						NR 149.06 (1)
14	Are records kept in secure manner, recorded in ink or stored electronically w/ safeguards?						NR 149.06 (5)
15	Are sample results traceable to analyst, date collected, and method used including raw data, calculations, results and final report?						NR 149.06(1)a.
16	Are sample collection records complete? (i.e. sample dates, location, sampler, sample condition, preservation etc.)						NR 149.06 (1)
17	Is the raw data (i.e. absorbance, millivolts) recorded for all samples and standards?						NR 149.06(1)a.
18	Are sample results clearly traceable to the calibration curve that was used to generate them?						NR 149.06(1)a.
19	Are equipment maintenance records for all analytical equipment kept?						NR 149.06 (1)
20	Are clear records of replicates and associated control limits available and current?						NR 149.06 (1)
21	Are clear records of spikes and associated control limits available and current?	NA	NA				NR 149.06 (1)
22	Are records associated with blind and reference samples available?						NR 149.06 (1)
23	Are records of corrective actions taken in response to QC failures available?						NR 149.06 (1)
24	Does corrective action include qualification of data on data report or DMR?						NR 149.14 (3)h.

	Other Observations